WHAT IS CLAIMED IS:

1. A hinge for a folding ladder having first and second ladder frames, the hinge comprising:

a main hinge unit, comprising:

first and second support arms commonly mounted to an upper end of the first ladder frame; and

first and second disc parts extending from upper ends of the first and second support arms, respectively, the first and second disc parts being spaced apart from each other by a predetermined interval;

a subsidiary hinge unit, comprising:

a subsidiary support arm mounted to an upper end of the second ladder frame; and

a subsidiary disc part extending from an upper end of the subsidiary support arm, the subsidiary disc part being disposed between the first and second disc parts, with a plurality of notches being provided along a peripheral edge of the subsidiary disc part; and

a locking unit, comprising:

a locking block to engage into one of the plurality of notches of the subsidiary hinge unit, thus preventing both the main and subsidiary hinge units from rotating relative to each other;

a press knob outwardly projected from the first disc

part, the press knob being coupled to the locking block by a coupling shaft; and

a return spring fitted over the coupling shaft to return the press knob and the locking block to original positions thereof.

2. The hinge according to claim 1, wherein the locking block comprises:

a shaft hole provided in a predetermined portion of the locking block to extend through the locking block, with the coupling shaft being inserted into the shaft hole;

a guide slot provided in a predetermined portion of the locking block to be parallel to the shaft hole to allow a locking piece to be seated in the guide slot;

a first pin insert hole provided in a predetermined portion of the locking block to be perpendicular to the guide slot; and

a torsion spring placed in the guide slot while being supported at a first end thereof on an inner surface of the guide slot, and supported at a second end thereof by a stop shoulder of the locking piece to elastically bias the locking piece to an outside of the guide slot.

3. The hinge according to claim 2, wherein the locking piece comprises:

a rotating disc part provided at a predetermined portion of the locking piece, the rotating disc part being disposed to correspond to a curved part of the inner surface of the guide slot of the locking block, with a second pin insert hole being formed at a center of the rotating disc part to correspond to the first pin insert hole; and

a pivot pin inserted into both the first and second pin insert holes to allow the locking piece to be rotated around the pivot pin at a predetermined angle.

4. The hinge according to claim 3, wherein the rotating disc part of the locking piece further comprises a projection part extending from the rotating disc part to be outwardly projected from the guide slot, with a locking step being provided on a side of the projection part to be stopped by an outer surface of the main hinge unit.